

DIRECTOR'S REPORT

1992 - 93

delnet

DELHI LIBRARY NETWORK

40, Max Mueller Marg

New Delhi - 110003

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Dr. S Varadarajan, President
Dr. S S Murthy, Vice-President
Mr. H K Kaul, Director
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DELNET has emerged as an important resource centre for the libraries in Delhi. It was registered as a Society on June 30, 1992, but its roots go back to the efforts that were made for its establishment during the last five years. In this first annual report I thought it would be important to give an overview of the beginnings made by us.

Libraries in Delhi have been growing very fast in number and size during the last four decades. They cater to specialized and general clientele and are of various types which include institutional libraries, research libraries, government libraries, public libraries, departmental libraries besides the libraries of the universities, colleges and schools. During the recent years cumulative information has been increasing very fast and with it the increase in the demands of the users. It was noticed that in this era of information explosion the libraries in Delhi were generally ill-equipped to handle and retrieve information effectively. The financial resources and the spaces for housing library collections were limited in almost all of them. The option left with the forward looking librarians was to promote the sharing of resources by automation and networking.

In January 1988 the India International Centre organized a panel discussion on "Sharing of Resources in Delhi Libraries: Networking and the Technological Challenges". At this meeting the importance of automation and networking was highlighted by many of the senior librarians and information scientists working in Delhi. It was decided to establish DELNET, a computerized network of Delhi libraries to tackle this problem. I was selected to be the Convener of DELNET and to promote it with the assistance of NISSAT. The financial support for DELNET was promised by NISSAT.

Soon after this meeting various heads of institutions in Delhi were invited to join DELNET. They were informed that:

1. The participating libraries would have to possess at least a micro-computer such as a PC-AT or a super-micro computer depending upon the collection and services offered by each library;
2. Each library would have to have a printer;
3. A standard input format for bibliographical information storage and transfer would be given to each participating library;

4. A communications software would be arranged; and
5. Training would be given to staff in the use of the hardware, software and the development of their specialized databases.

In response to this letter eighteen big and small institutions came forward to join DELNET and agreed to take the necessary steps.

Training Programmes

It was considered important to train library staff in the use of the software CDS/ISIS. Training courses on computer applications for DELNET participants were organized from time to time by the India International Centre with the financial assistance of NISSAT. NISSAT not only assisted the courses financially but its officers took keen interest in lecturing and conducting practicals during the courses and the workshops. The courses were held at IIC and DESIDOC. Fifty five librarians working in Delhi were trained in the use of CDS/ISIS upto January 1993. NISSAT is supporting yet another training course which would be organised soon.

The Feasibility Report

In 1989 NISSAT commissioned CMC Ltd. to undertake the preparation of a Feasibility Study Report of DELNET as CMC Ltd. had already prepared one for CALIBNET. A Coordination Committee with Dr. S. Varadarajan, former DG, CSIR and Secretary, DSIR as its Chairman and I as its Member-Secretary was constituted by NISSAT in order to guide and assist NISSAT and CMC Ltd. in the preparation of the report and evaluation of its findings. The members of the Coordination Committee included well-known librarians and computer specialists and the representatives of Mahanagar Telephone Nigam Ltd., University Grants Commission, CMC Ltd. and NISSAT.

The feasibility study report was completed in 1990. Thirty five libraries were included in the survey for the purposes of the report. The efforts were later made to implement it in various phases. 'O Phase' was added to it in order to establish E-Mail. In the feasibility report it was planned that DELNET will incorporate the following activities for DELNET:

1. Acquisition and fund accounting
 - Monitor funds.
 - Facilitate addition, deletion and modification in orders placed.

- Minimise repetitive work of bibliographic description of a document.
- Update library database when decision regarding disposal of document/weeding out/change of location is taken.
- Generate reports on
 - orders to suppliers
 - list of publishers and suppliers
 - accessions
 - list of books received as gratis
 - reminders
 - outstanding orders/bills
- Facilitate on-line enquiry on current/pre-orders research.

2. Processing and maintenance

- Update catalogue by matching it with the holdings
- Update union catalogue
- Update availability of funds when holdings are permanently transferred to other departments/centres
- Maintain class index entries for a specific field of knowledge
- Maintain subjectwise, authorwise, titlewise bibliographies
- Provide the library management with timely summaries about the stage of processing of newly acquired holdings
- Provide the list of latest additions

3. Serials control

- Update list of journals on subscription
- Register new journals
- Renew subscription
- Generate reports on
 - reminders to vendors for non-receipt of issue
 - list of latest additions

4. Circulation

- Maintain information on
 - patrons.
 - issue/ reservation records
 - inter-library loan records
- Generate reports on
 - outstanding books
 - outstanding requests
 - overdue notices
- Facilitate on-line enquiry regarding issue/reservation

5. User service

- Current awareness
- Queries on the holdings available

Hardware

DELNET advised the libraries to create databases on IBM compatible PC-ATs to begin with. It was decided that DELNET libraries would mostly be using micro and mini-computers. Later, the hardware calculated for each library in the feasibility report was arrived at after considering the application areas, data volumes, future growth and networking needs. Libraries would now have to upgrade their hardware on the basis of the recommendations of the feasibility report.

Software

NISSAT has been distributing the UNESCO software CDS/ISIS to the Indian libraries free of charge. NISSAT also commissioned CMC Ltd. to develop a multi-user software for the creation of bibliographic records in machine readable form. CMC has already produced the library software called MAITRAYEE. It is undergoing tests. Until a suitable multi-user bibliographic software was made available DELNET advised the libraries to create their databases and use CDS/ISIS for the purpose. It was decided that as soon as an appropriate multiuser software was ready the data created in CDS/ISIS would be converted into that software. We are on the look out for a suitable networking software for DELNET. The new software should be able to handle library functions and user services also.

Format

DELNET decided to use Common Communication Format (CCF) developed by UNESCO as this format incorporated only necessary and sufficient fields and conversion of the databases was possible at international levels. The list of mandatory and non-mandatory fields was finalised and distributed among the participating libraries.

Cataloguing

DELNET adopted AACR-2 as the code for cataloguing. To get more familiarity with its functioning DELNET also organised a workshop on AACR-2. Though CCF does not necessarily recommend to use a catalogue code but the use of AACR-2 helps in creating standard records.

Standardization

Standardization Committee of DELNET was constituted under the chaimanship of Dr. S S Murthy. It has been meeting from time to time. The Standardization Committee decided that standardization should take place in the following areas:

1. Communication format for interchange of bibliographic data;
2. Input/output format;
3. Bibliographic description: Mandatory and optional data elements;
4. Classification scheme and subject headings;
5. Thesaurus;
6. Authority files;
7. Language coverage and transliteration of Indian language scripts into Roman script;
8. Forms of heading;
9. Identification numbers, codes and abbreviations;
10. Data input for abstracting and indexing; and
11. Search command language.

It was felt that the standardization in case of classification schemes, subject headings and thesaurus given above under items 4 & 5 would not necessitate application of standards in the beginning. It was noted that the classification schemes generally in use in the Indian libraries were Colon Classification, Universal Decimal Classification and Dewey Decimal Classification and it would be almost impossible to impose a standard classification scheme on all libraries uniformly. As was revealed by Dr. Frederick Kilgore, Managing Director of OCLC, 80% of the requests received by them were either by author or by title and the Committee felt that a similar pattern of requests may emerge in DELNET also. Out of the remaining 20% requests, about 15% would be by subject headings. As such, for 5% requests by class numbers, either a participating library could search by all three classification numbers or it could pass on such requests to DELNET Central Office for necessary action. It was therefore considered that it would not be necessary to impose a standard classification scheme on the participating libraries.

With regard to the standardization of subject headings and the creation of thesaurus for DELNET, the committee decided that LCSH would be primarily used. Specialised libraries may use additional thesauri that were available in each major discipline such as social sciences, humanities, and science and technology. It was considered that a thesaurus for DELNET would eventually get created.

The committee decided that to begin with the libraries with more than 10,000 books in stock may be considered for the full institutional membership of DELNET.

Promotion of Database-creation

Efforts were made from the very beginning to promote the creation of databases in the DELNET libraries. Experts were sent to the libraries to solve the day to day problems. A panel of experts was being maintained for this purpose. Regular meetings of the librarians and computer specialists were organized to discuss mutual problems and the areas of cooperation. Nevertheless, there have been some libraries in Delhi that took keen interest in database creation on their own. The status of databases created by the libraries in Delhi as on January 1, 1993 is as follows:

Database Status of the Libraries in Delhi

Institute	Software/ Format	Details of the records created
1. BIS	—	11,200 ** 6,10,000 ***
2. CRRI	CDS/ISIS	500 **
3. CSIR	CDS/ISIS dbase III Own format	20,000 **
4. CSL	CDS/ISIS MINISIS CCF	2,000 **
5. DESIDOC	CDS/ISIS CCF	48,000 *
6. DOE	LIBSYS	5,500 * 450 ****
7. DST	CDS/ISIS CCF	16,000 *
8. IARI	CDS/ISIS CCF	2,500 *

9. IDSA	CDS/ISIS	500	*
	CCF	1000	**
10. IGNCA	dbase	50,000	*
	LC-MARC		
11. IGNOU	CDS/ISIS	40,000	*
12. IIC	CDS/ISIS	13,000	*
	CCF		
13. IIMC	CDS/ISIS	6,200	*
	CCF	1,400	**
14. IIPA	CDS/ISIS	1,500	*
	CCF	1,500	**
15. IIT	CDS/ISIS	1,400	**
	CCF		
16. INSA	Foxbase	1,100	****
17. INSDOC	—	50,000	*
18. JNU	MINISIS	90,000	**
	CDS/ISIS	30,000	*
	CCF	6,000	***
		5,000	****
19. MDI	CDS/ISIS	2,500	*
	CCF	8,000	*
		400	****
20. NASSDOC	CDS/ISIS	18,000	****
	dbase		
	CCF		
21. NCAER	MINISIS	25,000	*
22. NIEPA	CDS/ISIS	15,000	*
	CCF	5,000	**
23. NIHFV	CDS/ISIS	150	*
		200	**
		5,000	****

24.	NII	CDS/ISIS CCF	6,000	**
25.	NIPS	CDS/ISIS CCF	3,000	*
26.	NPL	Foxbase CDS/ISIS	6,000 2,500	* ****
27.	PC	LIBSYS CDS/ISIS	1,35,000	*
28.	PID	—	8,000	*
29.	RTL	CDS/ISIS CCF	77,600 23,000	** *
30.	SSPL	DELMS CCF	6,000	*
31.	TCS	CDS/ISIS	3,000 3,000	* ****
32.	TERI	CDS/ISIS CCF	8,000 3,500	* **
Total No. of records created			13,51,600	
	*	Monographs	=	4,81,850
	**	Periodical articles	=	2,18,300
	***	Standards	=	6,10,000
	****	Others	=	41,450

Consultative Committee on the Rationalisation of Periodicals

DELNET established a Consultative Committee on Rationalization of Periodicals in Delhi Libraries as per the plans of NISSAT. The Consultative Committee saved the foreign exchange worth Rs. 50 lakh by rationalising subscriptions to foreign periodicals for 1991 and 1992. This was mainly achieved in the fields of physical sciences, medical sciences and agricultural sciences. The chairmen of the sub-committees in these disciplines took keen interest in the rationalization programme. It was hoped that in the years to come through sharing of periodical resources DELNET would be able to save more foreign exchange for the country. In 1991 courier service was started among those libraries that

were participating in the sharing of resources. Lately the sub-committees in the fields of social sciences and humanities were also added. Thanks are due to the following chairmen of the sub-committees for making this programme successful.

- | | |
|---------------------------|------------------|
| a) Physical Sciences: | Mr. S M Dhawan |
| b) Medical Sciences: | Dr. R P Kumar |
| c) Agricultural Sciences: | Mr. Chhote Lal |
| d) Social Sciences: | Dr. K G Tyagi |
| e) Humanities: | Dr. T A V Murthy |

In connection with the rationalization programme, Jawaharlal Nehru University library was given the project to compile a union catalogue of current periodicals available in Delhi libraries. The work was completed and it is hoped that it would further facilitate the rationalization of foreign periodicals among DELNET libraries. A proposal is being sent to NISSAT for updating this database.

Retrospective Conversion

A project to assess the creation of databases using CDS/ISIS and CCF and also to find out the most economical approach for creating bibliographic databases was also undertaken. Various approaches were studied.

It was found that the collection of data directly from the books on the shelves was the best approach in terms of cost effectiveness and collection of necessary and sufficient data. And, balancing of jobs for this approach was best achieved with the help of two Bibliographers and one Data Input Assistant.

The Standard cost per entry with the involvement of Project Director was found to be Rs.8.98 and without his involvement it was Rs.7.02. These rates did not include the overheads and the costs of hardware, electricity etc.

Electronic Mail

In 1991, DELNET began its operation with the inauguration of E-Mail. The following libraries were using E-Mail facility as on January 31, 1993 :-

1. Department of Science and Technology
2. India International Centre
3. National Physical Laboratory
4. National Social Science Documentation Centre
5. Publication and Information Directorate
6. Tata Energy Research Institute
7. Indian Institute of Mass Communication

8. National Institute of Science, Technology and Development Studies
9. Indian National Scientific Documentation Centre
10. Defence Scientific Information & Documentation Centre
11. National Institute of Health and Family Welfare
12. Indian Institute of Technology
13. National Institute of Immunology
14. Central Secretariat Library
15. Indian Agricultural Research Institute
16. Department of Electronics
17. Jawaharlal Nehru University
18. Central Road Research Institute
19. Indira Gandhi National Open University
20. Ratan Tata Library, University of Delhi
21. Indian National Science Academy
22. Solid State Physics Laboratory
23. National Council of Cement and Building Materials
24. Council of Scientific and Industrial Research
25. All India Institute of Medical Sciences
26. Tata Consultancy Services

The purpose of E-Mail under 'O phase' had been to promote library mailing, inter-library requests, distribution of questionnaires, activation of professional contacts and demonstration of file transfers with a broader view of getting DELNET later connected to national and international databases and networks. E-Mail was being promoted among DELNET libraries as NISSAT was providing free of charge modems and E-mail softwares to the participating libraries. X-400 E-Mail software was obtained by NISSAT from the Department of Electronics.

Central Host

DELNET completed its work on Phase Zero that was introduced in the feasibility report. The activities on Phase I would begin from April 1, 1993. The most important thing was to finalise the selection of the Central Host. In the absence of a Central Host as per the configuration given by C.M.C. in the feasibility report, efforts were being made to obtain a 486 machine for the purpose. It was hoped that by the end of 1993-94 period a union catalogue of books available in machine readable form in DELNET libraries would be prepared.

Network Design

It was decided to initially use the dial-up network using the ordinary public switched telephone network in a batch mode. It was proposed to be upgraded, using leased lines and circuit switching principles.

A star-cum- distributed network design was planned for DELNET. In order to get the latest information on the subject, efforts were being made to invite an American network expert through the courtesy of the American Centre in April 1993. We hope to arrive at the right type of network design for DELNET.

An Indo-British Meet on Library Networking was organised by India International Centre in collaboration with the British Council Division, British High Commission and NISSAT. The recommendations of the Meet would go a long way in promoting DELNET activities in the right direction. (These recommendations are given in appendix I).

Research Advisory Committee

The Research Advisory Committee has recommended that research work may be taken up in the following areas to begin with:

1. Users needs (To be ascertained through Survey Research Methods)
2. Study of Indian softwares for network applications in libraries.

DELNET is taking effective measures in this regard. The use and study of LIBSYS software will begin from May, 1993.

Concluding Remarks

It is hoped that DELNET will emerge as a functional cooperative network incorporating all the disciplines - Science and Technology, Social Science and Humanities - in its ambit. And, each library would be contributing towards the purchase of hardware for its use and the creation of DELNET databases.

With the operation of E-Mail more attention was being given to the monitoring of the standards of the bibliographic databases that were being created in different libraries in Delhi. Without maintaining adequate standards it would rather be impossible to merge the databases into a single DELNET database. We therefore, hope that as the work on Phase 1 begins, not only would the librarians in DELNET become more conversant with the technology and the use of E-Mail and networking but also the central database of DELNET would be created and made operational. This database would be used not only by the librarians and scholars of Delhi but also by the librarians and scholars of the country and the world in general.

DELNET has been inviting the participating libraries to join as Institutional Members and pay an admission fee of Rs. 5,000/- and an annual membership fee of Rs. 5,000/-. Associate Institutional Members are also being admitted. We have started receiving acceptances and librar-

ies have begun signing the MOUs with DELNET in this regard. However, the membership is being taken by the libraries w.e.f. April 1, 1993.

Let me conclude by noting that it took us five years in promoting the creation of bibliographic databases of some recognizable size in the libraries in Delhi, for, without these databases neither could DELNET be made operational nor could the E-Mail become effective. It was essential to see that a network of this nature linked the libraries that were automated. For the success of these beginnings the credit goes to the active cooperation of the managements of the participating libraries and their library staff, for, without their cooperation neither NISSAT nor DELNET could play meaningful roles.

NISSAT has indeed been playing a vital role in the promotion of DELNET. I would like to thank Dr. A Lahiri, Joint Advisor, NISSAT/DSIR, who has been involved with the DELNET activities from the very beginning. Also, thanks are due to the officers of NISSAT, especially Mrs. S Ravindran, Mrs. Kamini Sharma, Mr. B G Sunder Singh, Mr. V K Varun and Mr. B N Sarkar. Though the financial assistance to DELNET from NISSAT has been meagre, but it has been vital for the establishment of DELNET.

In the promotion of DELNET I have been receiving guidance and support from Dr. N. Seshagiri, Director-General, National Informatics Centre, and Mr N. Vittal, Secretary, Department of Electronics. I am indeed grateful to them for their help. DELNET has approached NIC for assistance to augment its infrastructural facilities. We hope to receive the assistance during the next financial year.

Without the active support of India International Centre (IIC), DELNET may not have been established in its present form. The contributions of IIC in the establishment of DELNET will always be remembered. I wish to express grateful thanks to Dr. Karan Singh, President, Shri A Madhavan, Director and Shri N H Ramachandran, Secretary of the Centre for taking keen interest in the promotion of DELNET. Thanks are also due to Shri E Gonsalves, the former Director of IIC who had all along supported DELNET programmes. The staff of the IIC library provided useful inputs from time to time and we are indeed thankful to them. In particular thanks are due to Mrs. Vijaya Murthy, Assistant Librarian and Mr. Akhtar Parvez, Technical Assistant, for their sincere and continued help. I am sure that the support we have been receiving from various experts, officials and institutions will result in providing much needed services to researchers, scholars and students.

H K Kaul

Appendix - I

INDO-BRITISH MEET ON LIBRARY NETWORKING RECOMMENDATIONS

I. Essentials of Library Networking

Considering that resource-sharing of library collections and services has become a necessity due to economic and managerial constraints and noting that modern communication network technology is becoming cost-effective and operational at national level in India, it is recommended that:

An integrated management structure be established in each metropolitan network in India and the following services be promoted:

1. Create and maintain a computer-based shared catalogue and maintain central authority records.
2. Promote CAS and SDI services in libraries.
3. Create partial databases of external resources.
4. Maintain an user interface application software coupled with hardware and communication equipment.
5. Promote the standarization of records.
6. Establish a well structured professional manpower facilities to maintain the network centre.

NISSAT should be able to mobilize the financial resources needed for managing thier network on a continual basis with partial recovery of the fund from service charges.

II. Communication Infrastructure

Noting that resource-sharing is a communication intensive process, it is recommended that the departments and institutions like Department of Electronics, Department of Communication, National Informatics Centre and NISSAT should:

1. Arrange effective E-Mail communication between the libraries and networks within the country at subsidized rates.
2. Provide facilities to international vendors in India and allow specialised libraries to have access to world databases through them at subsidised rates.
3. Arrange coordination in functional activities and services by;

- a) Enforcing that uniform standards be adopted and maintained for creation of databases,
- b) Arranging access to external databases, and if necessary down loading of the required databases,
- c) Creating a system by which networks can share databases on agreeable terms,
- d) Developing databases on specialised themes that are updated periodically for use by specialist clientele in the country,
- e) Promoting the marketing of network products, and financial self sufficiency for network operations.

III. Network Products and Services

Considering that metropolitan library networks should develop variety of products and services for benefit of its clientele, it is recommended that:

In a network preferences may be given to :

- a) Shared cataloguing,
- b) Preparation of Union Catalogues,
- c) Switching over to on-line cataloguing as rapidly as feasible,
- d) Provide for full screen editing,
- e) Preparation of the list of latest additions,
- f) Retrospective conversions,
- g) Maintenance of authority files, and
- h) Approved standards for the input of Indian materials.

Further, it may be added that production of catalogue for exchange etc. could be confined in the beginning to magnetic floppies and later for commercial purposes extended to:

- a) Card form;
- b) Book form;
- c) Magnetic tapes;
- d) Optical discs; and
- e) Micro-fiche.

For this purpose, the networks should steadily be augmented with the following communication facilities in a phased manner:

- a) Tele-facsimile;
- b) Tele-conferencing;

- c) Offering of databases in CD-ROM;
- d) Simple user interface (OPAC);
- e) Availability of special display formats for different types of libraries, and users;
- f) Community information and library network news.

IV Support for Library Operation and Services

Recognising that metropolitan library networks are going to demand exacting information processing and performance, it is recommended that:

- a) Circulation module should provide for fully on-line automated services with backup on-line charging and discharging facilities with managerial controls for the same.
- b) Acquisition module should provide for fully on-line ordering, stock taking and servicing for further processing of documents,
- c) Serials control module for on-line registration, reminders, union-catalogue services, updating of the same, effective document supply services, besides administrative approaches to serial control.

V. Governance and Management

In order to promote each metropolitan network as a stable body for effective governance, it should:

- a) be registered as a separate body with the financial support of NISSAT and a representative of NISSAT permanently on its Governing Board,
- b) function for some years under the supervision of a host institution, and
- c) develop close bonds between the networking libraries. It is important that the participating libraries adhere to the memorandums of understanding that cater to their mutual interests and are based on straight forward and clear cut principles. Further, they have to be flexible enough to be updated and adjusted to changing library environments. It is therefore recommended that:

Memorandum of Understanding (MOU) should take into account:

1. Copyright and security requirements,
2. Proprietary rights,
3. Licences granted to the participating libraries by the networks,
4. The modes of acquiring equipment by the participating libraries,
5. Preparation of an operating manual,

6. Amount of registration fee and annual fee to be paid by participating library,
7. Fee to be fixed for extra-use than basically outlined,
8. Compensation to be paid to a big library which is mostly offering its materials and not receiving much in return,
9. Maintenance and alterations,
10. Warranty,
11. Termination of agreements,
12. Indemnity, disputes etc.

VI. Relation Between Ernet and Janet for Academic Transactions

Considering with interest the useful developments that have taken place in respect of library networking and also the end-users intermediation in academic and research programmes and also considering that the ERNET programme of India, which is rapidly connecting many of the educational institutions and also SIRNET promoted by INSDOC for E-Mail and other electronic transmission, it is recommended that:

NISSAT in collaboration with many organizations should actively promote and provide the necessary infrastructure to the libraries all over India, to develop a culture to use the E-Mail transactions, that would ultimately improve response time nationally and internationally. It is also recommended that the library and information professionals and academicians in the programme should make efforts in developing attitudes helpful to quick responses to requests through E-Mail in their own institutions.

VII. Training and Education in Electronic Communications Network

Considering the variety of knowledge and skills needed for the effective and efficient use of electronic communication facilities for library and information purposes, it is recommended that:

NISSAT in collaboration with the other organizations should promote and organise short-term courses for library and information professionals on the E-Mail, video-text and other network facilities available in India, and in view of onset of electronic revolution in communication it is recommended that the library and information science schools in India should develop curricula and teaching network facilities as a specialised course. NISSAT should provide infrastructure on a selective basis to some library schools and offer curricula modules for different types of courses in library automation and networking.

Research Advisory Committee

1. Dr. S Varadarajan, *Chairman*
2. Mr. H K Kaul
3. Prof. T Viswanathan
4. Dr. S Ramakrishnan
5. Dr. N Vijayaditya
6. Ms. Janet Giligan
7. Prof. R Satyanarayana
8. Mr. P Jayarajan
9. Mr. R K Srivastava
10. Dr. P K Jayaswal

Standardisation Committee

1. Dr. S S Murthy, *Chairman*
2. Mr. H K Kaul
3. Mr. S Deshmukh
4. Mrs. Neela Jagannathan
5. Mr. S Majumdar
6. Dr. T A V Murthy
7. Ms. Rita Shukla
8. Mr. B G Sunder Singh
9. Mr. T Viswanadham